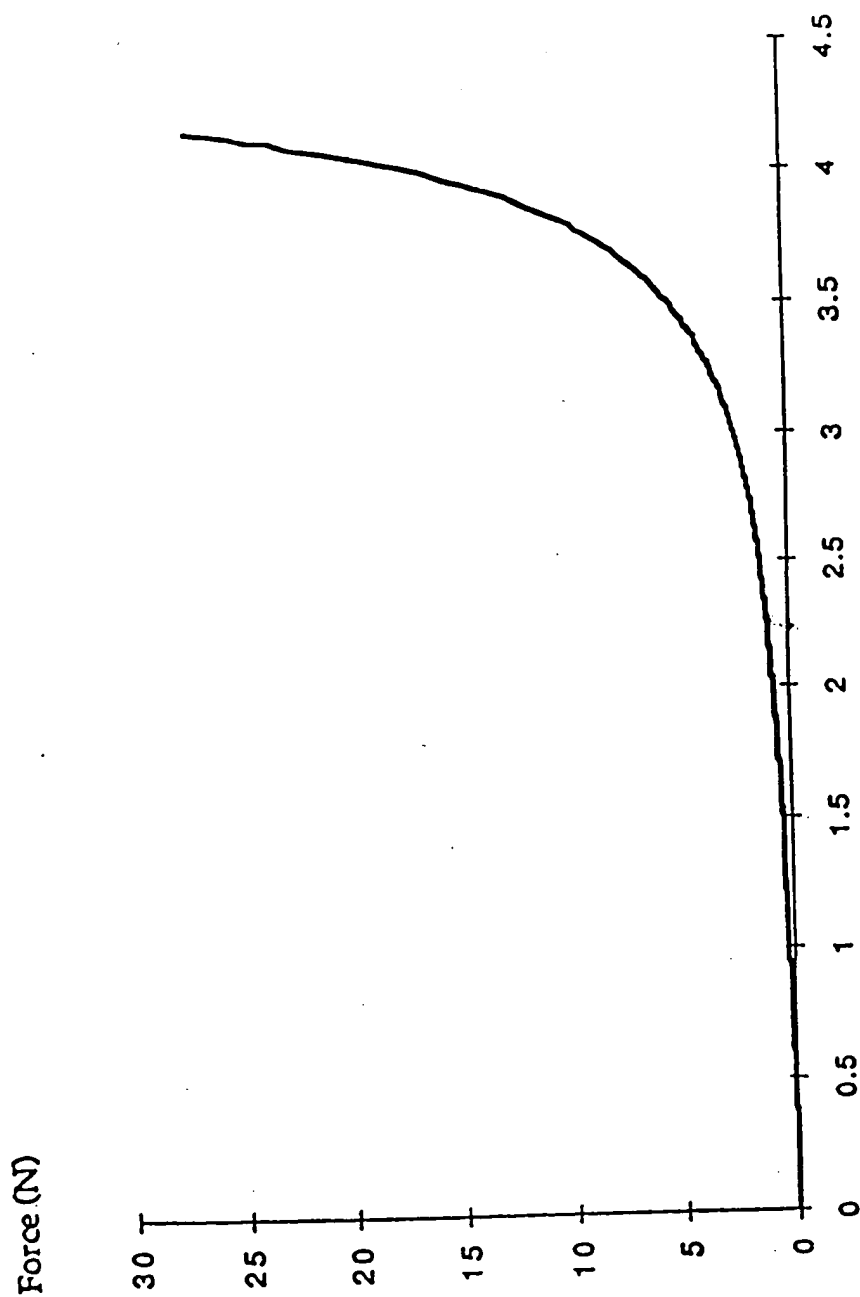


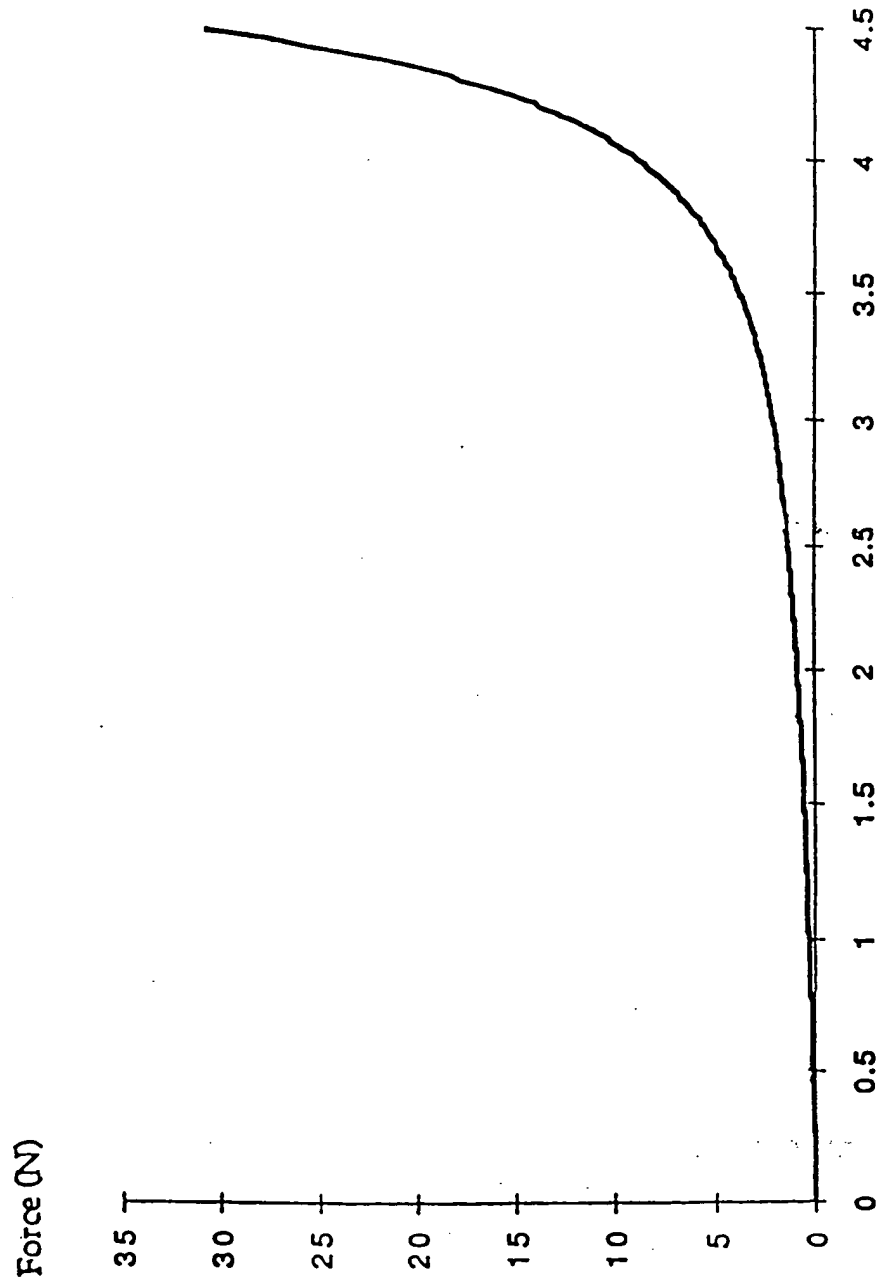
Compression of 5 mm disk (5 mm diameter) at 2 mm/min



Displacement (mm)

Fig. 1

Compression of 5 mm disk (5 mm diameter) at 2 mm/min



Displacement (mm)

Fig. 2

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Diamine

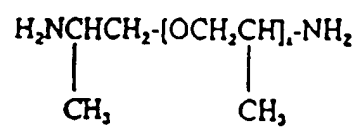


Fig. 3a

Triamine

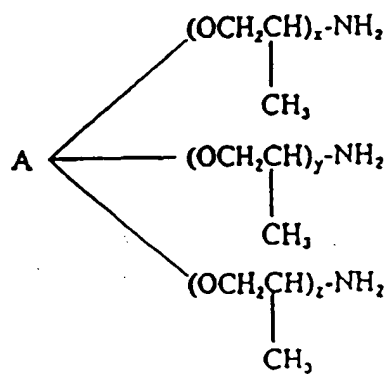


Fig. 3b

SG-PEG: Tetrafunctionally Activated PEG Succinimidyl Glutarate

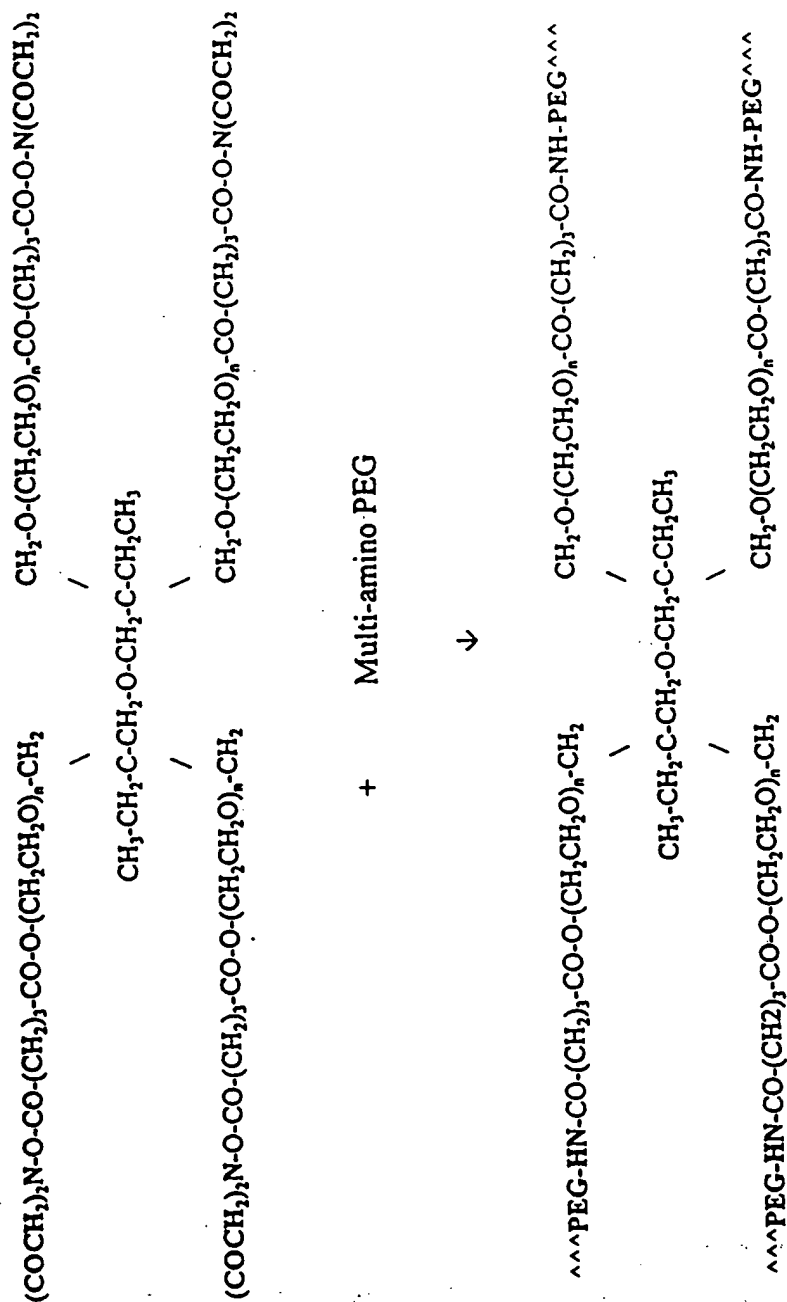


Fig. 4

SE-PEG, m=3: Tetrafunctionally Activated PEG Succinimidyl Butylate (Ether Linkage)

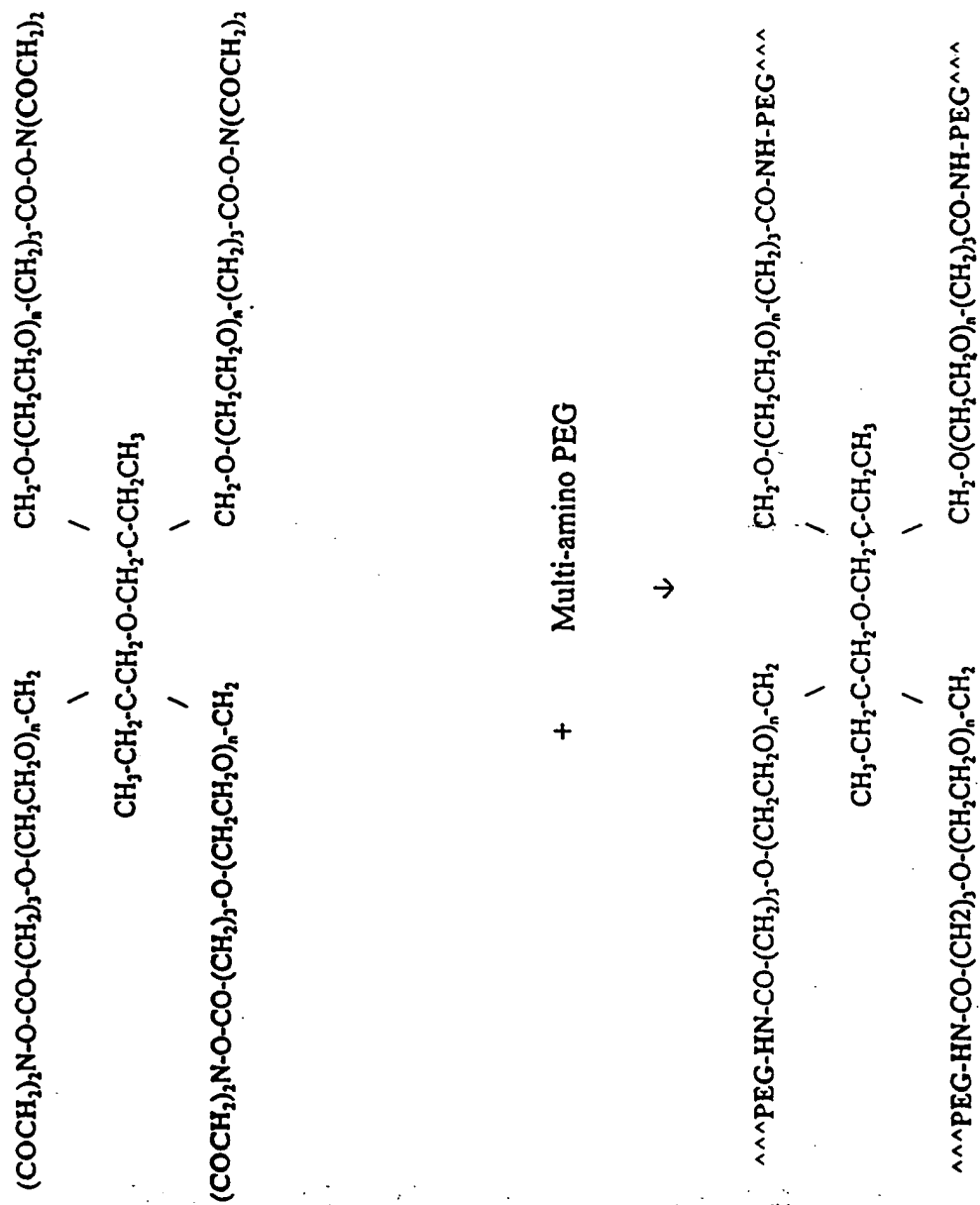


Fig. 5



SE-PEG, m=1 Tetrafunctionally Activated PEG Succinimidyl Acetate (Ether Linkage)

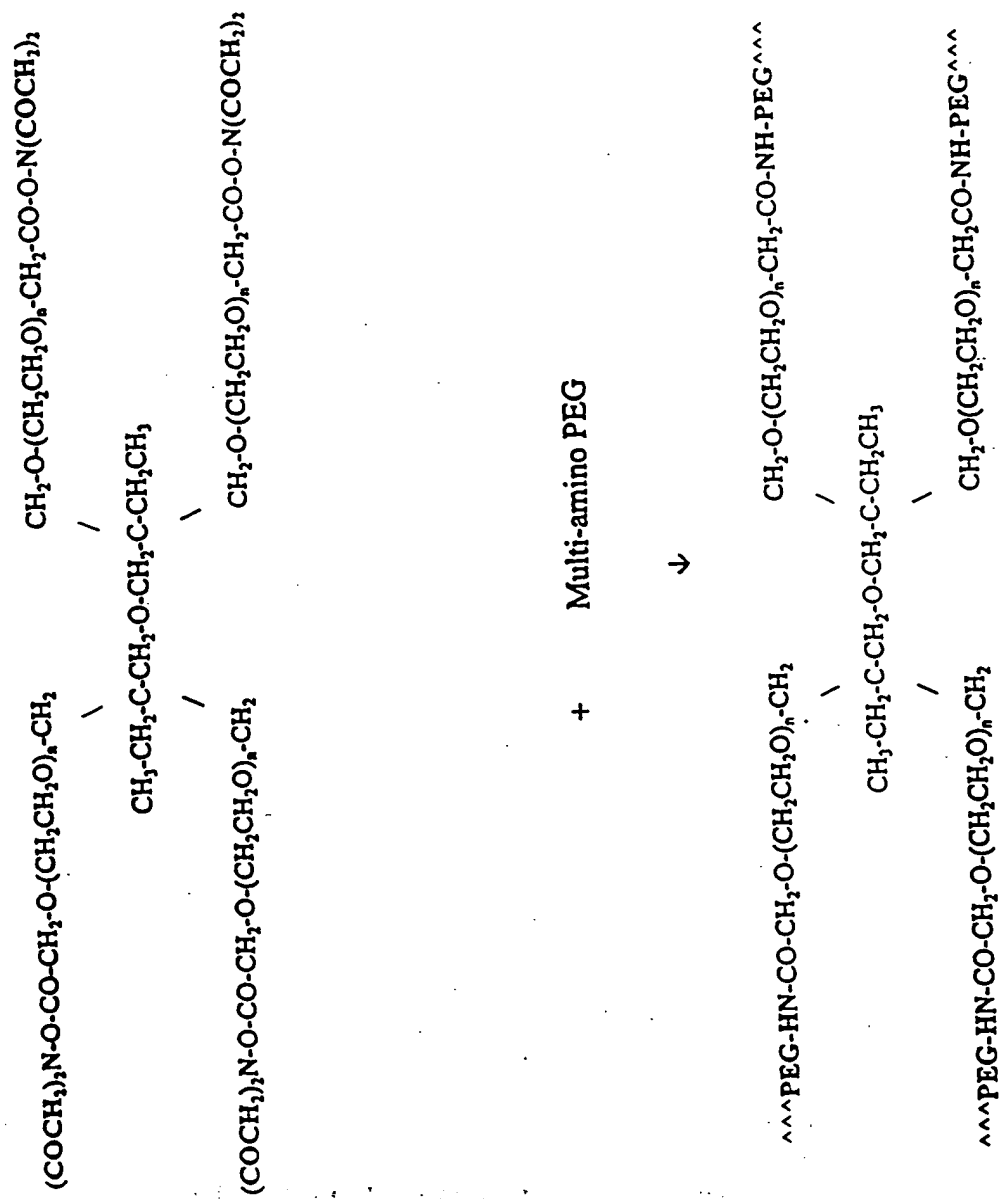


Fig. 7

## SSA-PEG, m=2: Tetrafunctionally Activated PEG Succinimidyl Succinamide

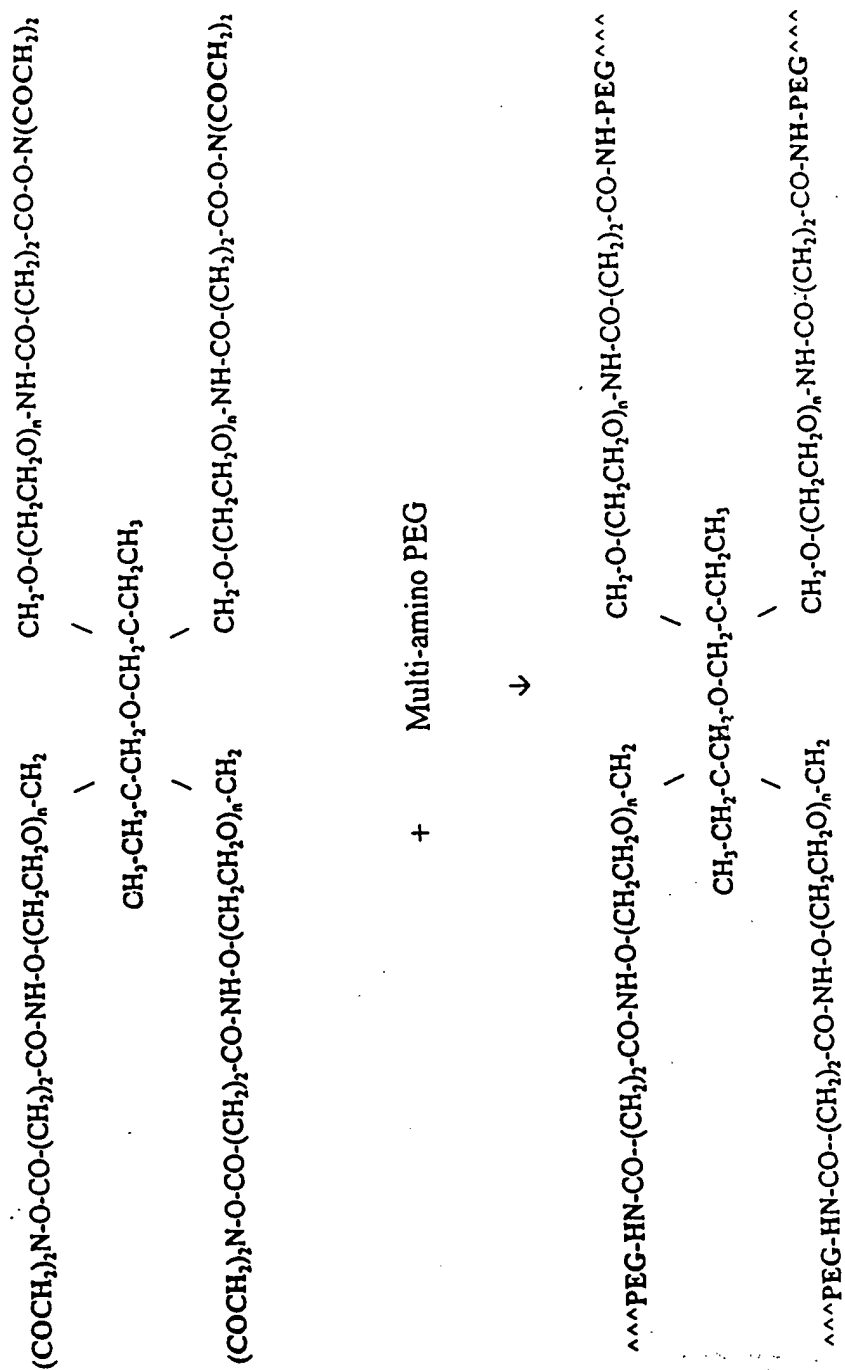
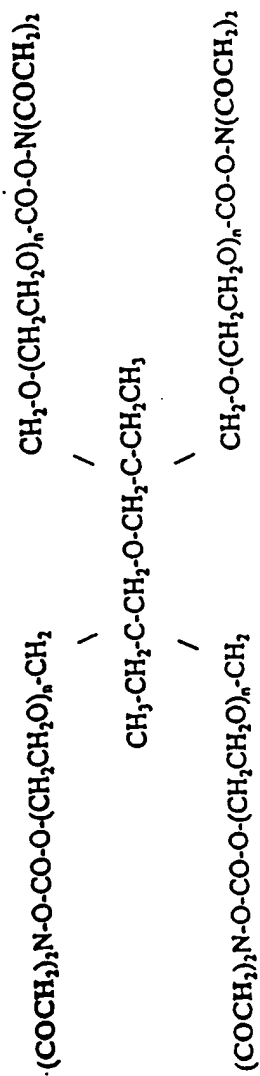


Fig. 8



SC-PEG, m=0: Tetrafunctionally Activated PEG Succinimidyl Carbonate



+ Multi-amino PEG

↓

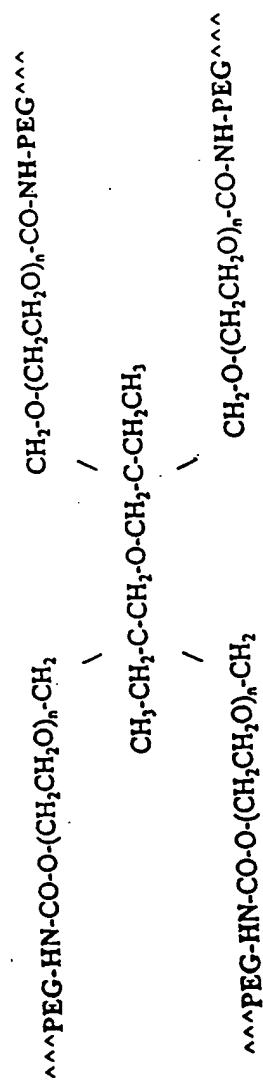
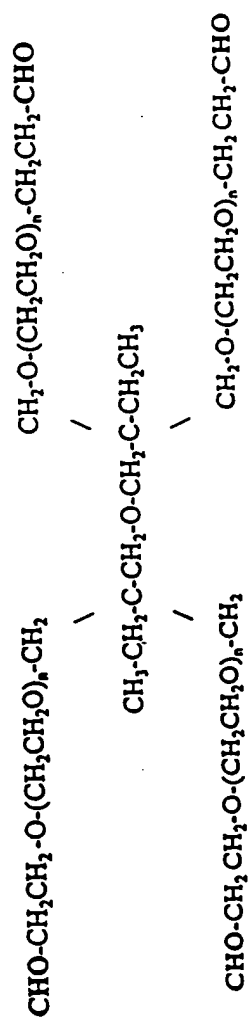


Fig. 9

A-PEG: Tetrafunctionally Activated PEG Propion Aldehyde



+ Multi-amino PEG

↓

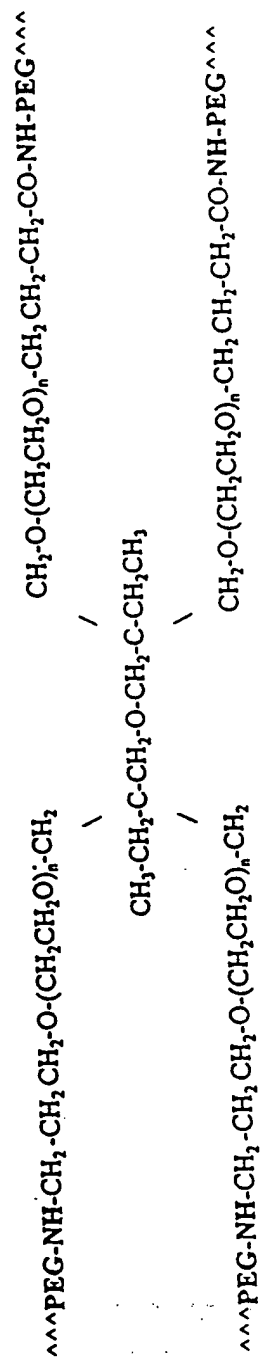


Fig. 10

## E-PEG: Tetrafunctionally Activated PEG Glycidyl Ether

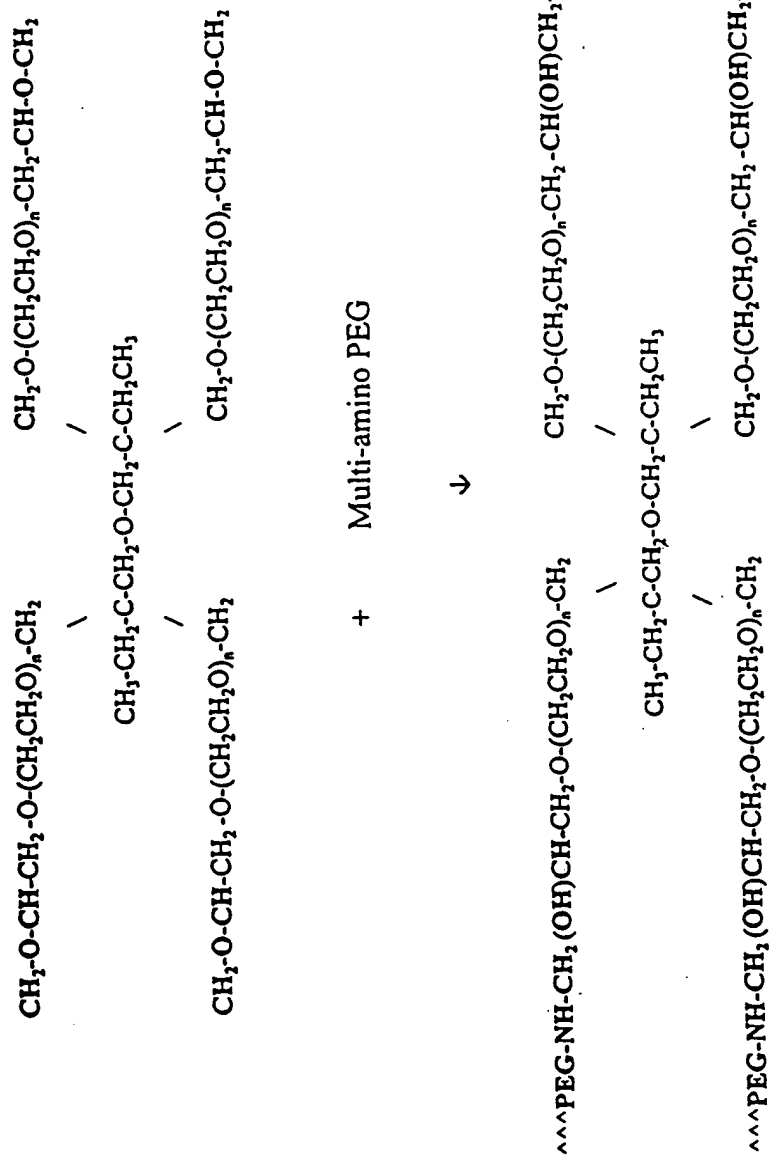


Fig. 11

## I-PEG: Tetrafunctionally Activated PEG Isocyanate

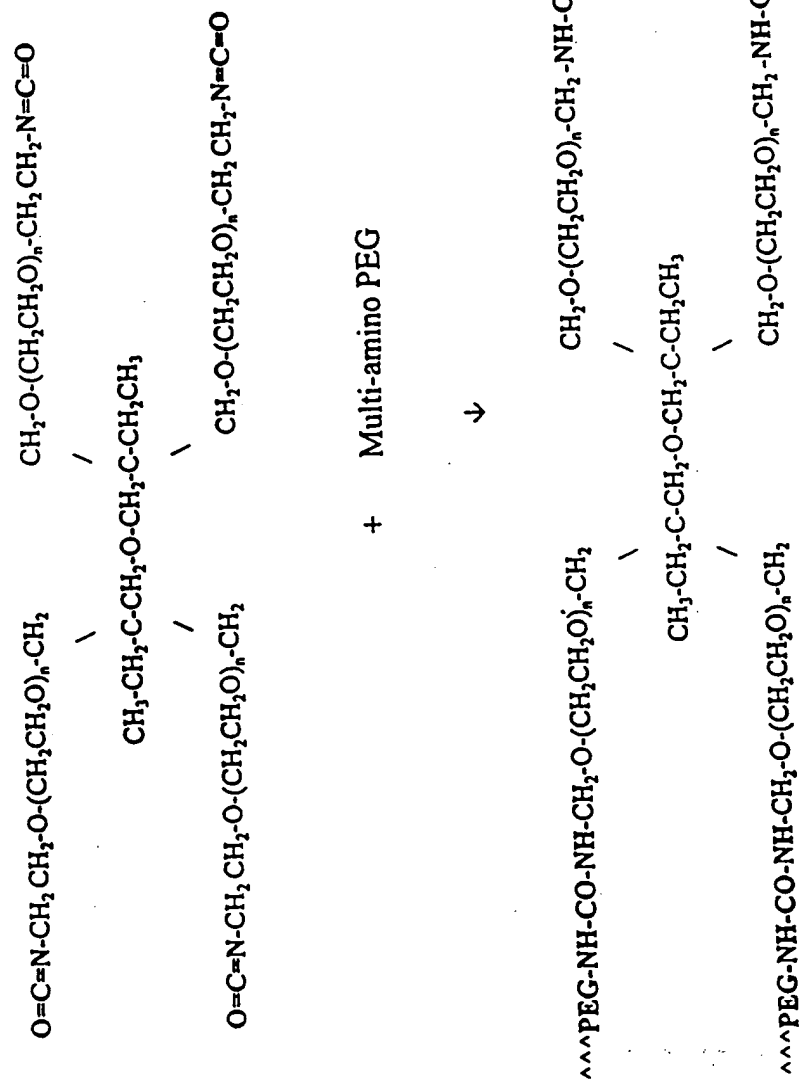
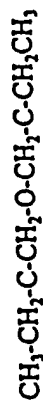


Fig. 12

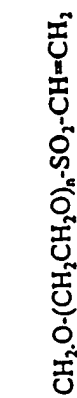
## V-PEG: Tetrafunctionally Activated PEG Vinylsulfone



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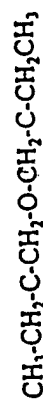


+ Multi-amino PEG

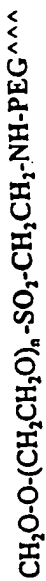
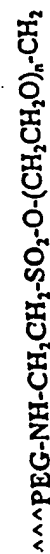
↓



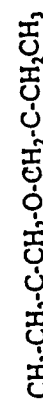
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Fig. 13

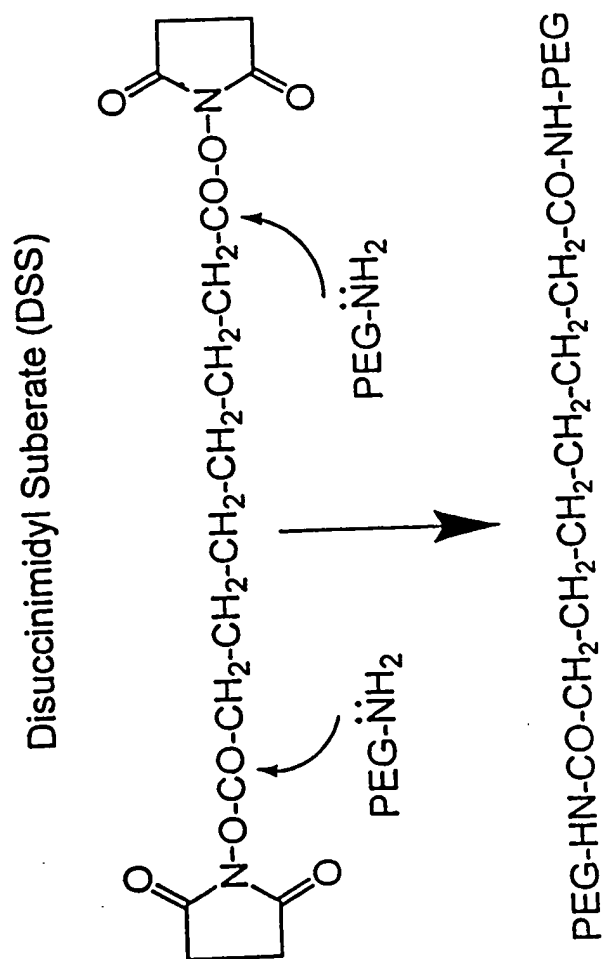


Fig. 14

Dithiobis(succinimidylpropionate) (DSP)

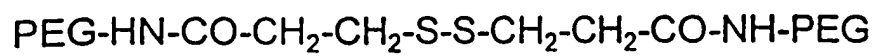
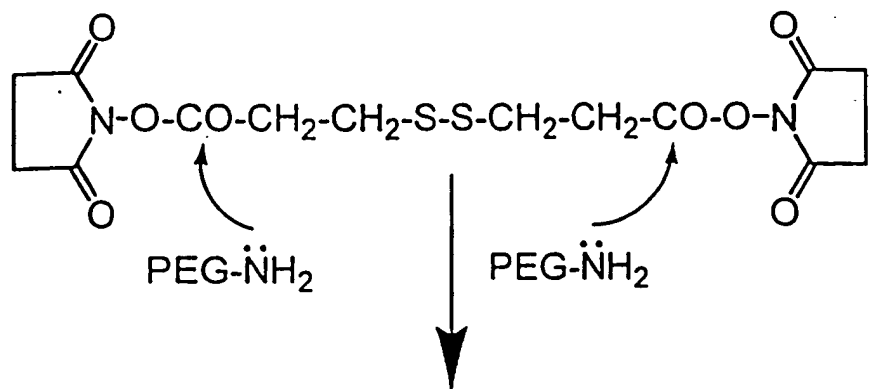


Fig. 15

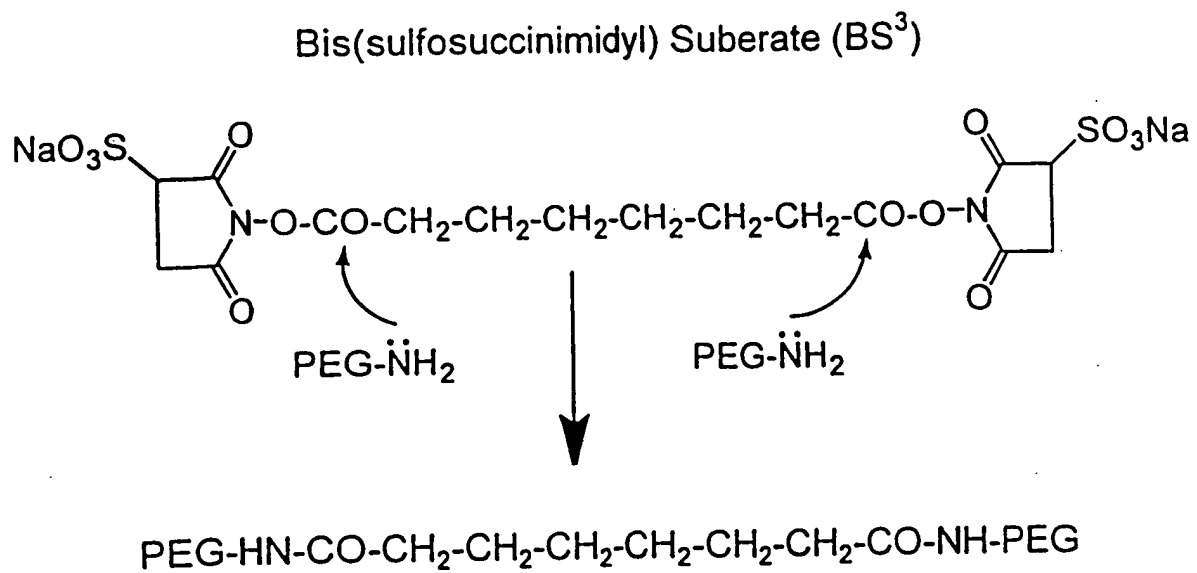


Fig. 16



Bis(2-succinimidooxycarbonyloxy)ethyl Sulfone (BSOCOES)

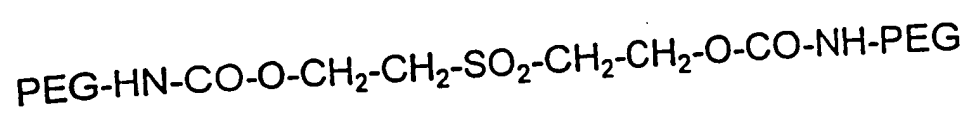
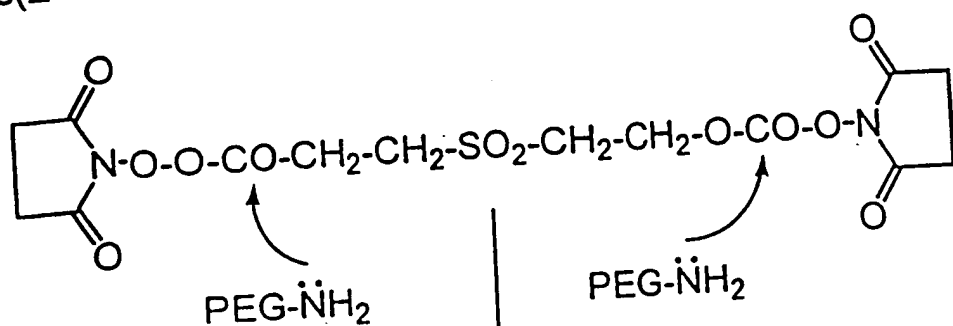


Fig. 17

3,3'-Dithiobis(sulfosuccinimidyl-propionate) (DTSSP)

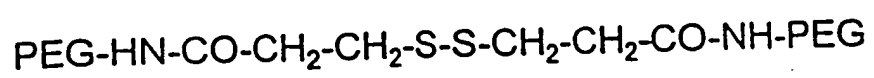
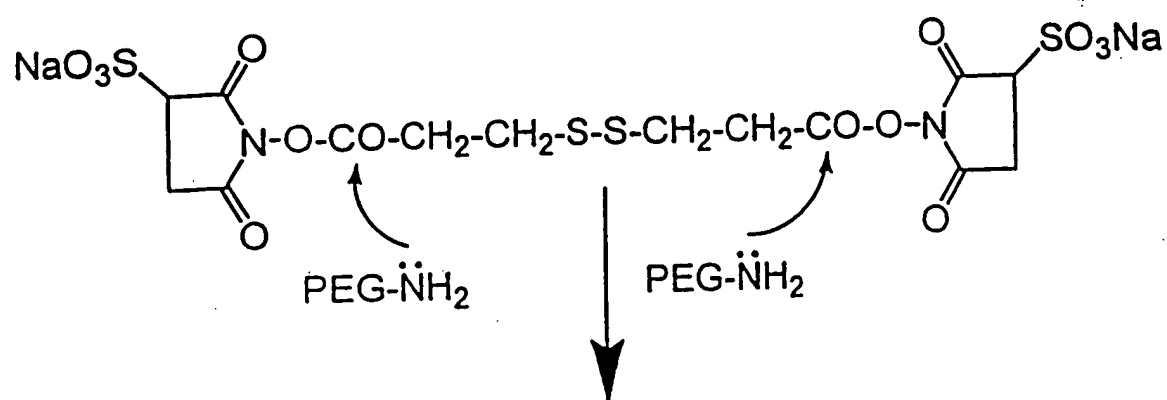


Fig. 18